

USING THE UTILITY PROGRAMS

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CONTENTS OF THIS MANUAL

This manual contains instructions for using the Utility Programs.
You will learn how to

- format storage devices;
- copy system and user files from one device to another;
- reorganize subcatalogs and files;
- reconfigure the system software;
- print out permanent copies of XPL programs;
- locate text patterns in one or more files;
- make changes in the catalog of the tape drive;
- recover an individual file after a disk failure.

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INTRODUCTION

The floppy diskette labeled "Utility Programs" contains eight Utility programs plus two hardware diagnostic tools (MEMBURN and PRINTEST). Three of the Utility programs, FORMCOPY, SHUFFLE and CONFIGUR, are also installed in the top-level catalog of the Winchester disk.

FORMCOPY

FORMCOPY formats floppy diskettes or tape cartridges and copies files from any storage device in the system to any other. All files on a diskette, all files in a subcatalog, or individual files can be copied.

SHUFFLE

SHUFFLE reorganizes the contents of a storage device to make room for more files. Spaces between files and/or subcatalogs are moved to the end of the storage device. Any storage device or catalog, except the tape cartridge, can be shuffled.

CONFIGUR

CONFIGUR tells the operating system software about the physical setup of the computer installation. Memory size, terminal and printer type, processor type, storage device type, real-time clock speed and the presence or absence of musical interfaces are recorded within the operating system by the CONFIGUR program. You can configure the system software located anywhere on the Winchester disk or on a floppy diskette.

LISTING

LISTING prints out permanent listings of XPL programs from any storage device except the tape drive. You can also print out subcatalog files. LISTING supports several printers.

FIND

FIND locates text patterns in a file or group of files.

TAPECAT

TAPECAT is used to make changes in the catalog of the tape drive.

RECOVER

RECOVER allows you to recover an individual file after a disk failure.

Device Names

FORMCOPY, CONFIGUR, LISTING and SHUFFLE all have quick access to any storage device in the system except the tape drive (which can only be accessed by FORMCOPY). When you run one of these Utility programs, you will be asked to specify the device or devices involved using these identifiers:

F0	Floppy diskette in drive attached to FLOPPY DRIVE-0
F1	Floppy diskette in drive attached to FLOPPY DRIVE-1
R0	Minidiskette in remote drive-0
R1	Minidiskette in remote drive-1
W0	Winchester disk attached to WINCHESTER-0
W1	Winchester disk attached to first Winchester disk
T0	Tape drive subsystem
CC	Current catalog

You will note that these are the same as the device identifiers used in Monitor commands with the addition of T0 (accessed only with FORMCOPY) and CC (accessed by all Utility programs).

Another device name, SC (System catalog), is not used by the Utility programs.

Running the Utility Programs

Instructions for using the CONFIGUR program are in the section, "CONFIGUR." To run any of the other Utility programs, follow these instructions:

With a Winchester system, remove the Winchester Bootload diskette from FLOPPY DRIVE-0 and replace it with the Utilities diskette. Then type

```
OLD F0:<Utility filename>;RUN
```

With dual drive systems, place the Utilities diskette in FLOPPY DRIVE-1.

Then type

```
OLD <Utility filename>; RUN
```

Winchester systems also have FORMCOPY, CONFIGUR and SHUFFLE in the top-level catalog. To access these utilities, enter the top-level catalog and type

```
OLD <Utility filename>; RUN
```

Once the command RUN has been entered, a menu with instructions for operating the Utility program will appear on the terminal screen. Each program offers options, although you will often use the default options.

FORMCOPY

CAUTION: Carelessly used, FORMCOPY can obliterate valued information very quickly. Please read the following instructions very carefully before using.

The FORMCOPY program has two separate functions: formatting and copying.

Formatting prepares the magnetic media on a floppy diskette, Winchester disk or tape cartridge for storage of data. Note that if you format an old diskette or tape cartridge, you will erase any previously stored information.

CAUTION: Do NOT use FORMCOPY to format your Winchester disk. Winchester formatting is done here at N.E.D. Any future formatting should be done using the Winchester Installation Program.

In addition to formatting, FORMCOPY copies files and subcatalogs to and from any storage device in the system. You can copy from MAIN to AUXILIARY drive, from Winchester to floppy, from MAIN floppy drive to remote drive, from tape cartridge to current catalog, etc. You can copy a single file, a series of selected files, an entire subcatalog or an entire floppy from one device to another. You can also copy any of the above into a subcatalog (except another subcatalog).

The Main Menu

When FORMCOPY is run, the terminal screen displays a menu listing options and commands. Across the top of the screen is a set of basic instructions for using FORMCOPY. To the left is a list of the valid commands and to the right side of the screen is the list of options.

First, note that the default mode is COPY. This is because you will mostly use FORMCOPY for copying files and making back-up diskettes.

The list of commands on the left side of the screen varies depending on the mode. For copying, the list of commands is:

- S View source catalog
- D View destination catalog
- I Interchange source and destination
- Q Quit (return to operating system)

RETURN Initiates copy

When you press the terminal key corresponding to these commands, the operation described next to the key name will be performed. For example, pressing the S key will bring up the source catalog or catalog from which files are to be copied. Pressing the D key will bring up the destination catalog or catalog to which files are to be copied.

When you press RETURN, you will always be asked to verify your selections by typing "OK" and pressing RETURN again. This is to prevent a premature program initiation.

At any time while this menu is on the screen, you can return to the Monitor by typing Q (for Quit) or by pressing the BREAK key.

Listed on the right side of the screen are options with default choices. For dual drive systems, the default choices are

Mode:	Copy
Source:	F1 (Rightmost floppy)
Destination:	F0 (Leftmost floppy)
Select:	No
Alphabetic:	No
Erase:	No
Disk format:	

For Winchester systems, the default choices are the same except for Source, which is W0 (or CC if you have run FORMCOPY from a subcatalog).

You change the default options by first moving the cursor to the option to be changed and then pressing the space bar until the desired option appears.

Mode Options

The MODE option specifies the mode of operation. If you choose the default option, COPY, files on the source device will be copied onto the destination device when you press the RETURN key.

FORMAT AND COPY, which appears if you press the space bar when the cursor is on the MODE option, will cause the destination device to be formatted before the source files are copied to the destination device.

Pressing the space bar again will bring up the FORMAT mode which means that the destination device will be formatted only.

Pressing the space bar one more time will return COPY to the mode option.

Notice that when you change the MODE option, the commands on the left side of the screen change also. That is, if you select FORMAT as your mode of operation, the list of valid commands will include only

D

Q

RETURN

since the S and I commands are irrelevant in this mode.

Changing this option also changes some of the other options. For example, when you select the FORMAT only option, the SOURCE option in the second set of options will not appear nor will the third set of options which define COPY parameters. On the other hand, the last option, defining a FORMAT parameter, will not appear when you select the COPY only mode.

Source and Destination Devices

The next two options specify the SOURCE and DESTINATION devices. You can choose a SOURCE device only when you are using the COPY or FORMAT AND COPY modes of operation. You select a DESTINATION device for all operations. The default SOURCE is always your current catalog (whether CC, W0, F1 or R0). The default DESTINATION for both systems is F0.

Winchester users with a tape cartridge drive will change the DESTINATION to T0 to copy files for archival purposes. To recall files from the tape cartridge, change the SOURCE to T0 and the DESTINATION to CC or W0. (This can only be done if the system has been configured to include a tape drive.)

Notice that the Command Key "I," listed on the left side of the screen, can be used to interchange the SOURCE and DESTINATION.

Copying Parameters

The SELECT option allows you to select specific files to be copied. If you choose YES and press RETURN, type OK, and press RETURN again, a new menu will appear on the screen. For example, if you are copying from F1 to F0, you will see at the top of the menu

Copy from: F1 (Rightmost floppy)
Copying to: F0 (Leftmost floppy)

SELECT option: Use the cursor to move over the files. Press the space bar to select or deselect a file to copy. Press RETURN to initiate the copy. Press Q to abort the copy operation. Selected files are marked with a >.

Below this, the source catalog directory will be displayed on the screen with a vertical line (|) in front of each filename. If you don't want a file copied, skip over the filename by pressing the right arrow key. If you do want a file copied, press the spacebar. The | in front of the file will change to a > as you mark it. If you change your mind, go backward using the left arrow key, press the spacebar again and the file will be unmarked. In fact, you can move around the directory in any way using the arrow keys and the PF1 or HOME keys.

If the selected file is already stored on the destination device, you will be so informed during the copy operation. You will then have the option of replacing the destination version of the file with the source version or keeping the original destination version.

If you select YES for the ALPHABETIC option, the files will be copied in alphabetical order. If you leave the option at NO, they will be copied in the same order as they occur on the source device.

If you change the third option, ERASE, from NO to YES, then the entire destination catalog will be erased before any copy operation commences. This means that all files stored on the destination device will be destroyed.

CAUTION: If you are copying files into the top-level catalog on the Winchester, the ERASE option should be set to NO. Otherwise you will erase the top-level catalog and you will be unable to run your system.

Formatting Parameters

The last option specifies a formatting parameter. The DISK FORMAT option allows you to choose between formatting for N.E.D. or for CP/M. You will always choose N.E.D. except when creating diskettes for use with the CP/M option.

Formcopy Procedure

Once you initiate the selected operation, the screen will clear and information concerning the procedure will appear.

For example, if you have selected the FORMAT mode, FORMCOPY will tell you as it begins the formatting pass, then the test pass, and when formatting is complete. If the diskette being formatting is defective, FORMCOPY will print details about the exact address of the defect and warn you not to use the diskette.

If you are copying, and a file or subcatalog will not fit on the destination device, FORMCOPY will give you the option of continuing with a new tape or diskette or quitting the operation. If you elect to continue copying with a new diskette or tape, press RETURN. The mode and erase options will appear in the upper right-hand corner of the Copy Menu.

For example, if you were copying files from CC to T0, you would see

Copying to: T0	Copying file: <filename>
Copying from: CC <catalog name>	Mode: Copy
-----	Erase: No
Files copied:	-----
<filename> <filename> <filename>	

Insert the next disk/tape into F0 (Leftmost floppy). Then verify selected modes. Change modes with space bar. Press RETURN to continue or Q to quit.

You would need to change the mode option, for example, if you had been using the COPY only mode to copy onto a formatted diskette, but needed to continue copying onto an unformatted diskette.

SHUFFLE

When you store files, empty sectors often occur between files. Sometimes the error message

No contiguous space on disk

occurs when you attempt to SAVE a file. This means that there are probably enough empty sectors scattered throughout the device to store the file but not enough consecutive ones.

The SHUFFLE program is used to pack files and subcatalogs together and to collect the empty sectors into a group. You can also rearrange the files so that specified files are collected into adjacent areas.

The files on any storage device connected to the computer, except the tape drive, can be shuffled.

The Menu

When the SHUFFLE program is run, a menu appears on the screen with general instructions for using SHUFFLE across the top of the screen. A box to the left contains a list of valid commands and one to the right a list of options.

The commands include

C to display catalog
Q to quit (return to Monitor)

RETURN to start SHUFFLE

The options include

Storage Device
Collect Mode

To change an option, move the cursor to the option and press the space bar. The storage devices available are those attached to your system. The COLLECT mode makes it possible to specify files to be stored consecutively.

If the COLLECT option is set to Yes when you press RETURN, a list of files on the device to be shuffled will appear. Use the arrow keys to move the cursor from filename to filename and press the spacebar to select a file for collecting (or deselect an already selected file).

After you have marked the files for collecting, press RETURN to initiate the shuffle. The files you have marked will be moved to a collect area on the storage device, the remaining files will be shuffled, and then the marked files will be placed in one area of the device.

CONFIGUR

All operating system software must be customized for the particular set of hardware in the Synclavier (R) Digital Music System. This customizing is called configuring the system and is initially performed here at New England Digital with the CONFIGUR program. You also have a copy of this program so that you can reconfigure your system diskette or Winchester disk whenever you change or expand your options or when you install new software.

For example, if you decide to add a printer or change the type of terminal you are using or add memory to the computer, you will use the CONFIGUR program to tell the operating system about these changes.

-----+
| WARNING: You cannot configure previously released system |
| software with the CONFIGUR program dated January 15, 1985. If |
| you attempt to do so an error message will occur. |
|-----+|

| Neither can you configure system software released after |
| February 15, 1985 with previously released CONFIGUR programs. |
| If you attempt to do so, your system software may be destroyed. |
|-----+|

Running CONFIGUR

To run CONFIGUR, you must first enter the device or subcatalog where the system software to be configured is stored. This is normally the top-level catalog of your system device (F0 for dual floppy drive users and W0 for Winchester users).

To reconfigure your Winchester-based system, follow these instructions.

1. Enter the top-level catalog (which contains the system software to be configured) by typing

ENTER :

2. Recall CONFIGUR by typing

OLD CONFIGUR

3. Run CONFIGUR by typing

RUN

If your system software is in the MAIN drive of a dual floppy drive system and the CONFIGUR program is on the Utilities diskette in the AUXILIARY drive, follow these steps to configure the system software:

1. Recall CONFIGUR by typing

OLD CONFIGUR

2. Enter the MAIN drive by typing

ENTER F0:

3. Run CONFIGUR by typing

RUN

```
+-----+
| WARNING: Certain wrong responses in the configuration process |
| can make the system software incapable of loading the computer. |
| Please read the following carefully and use care when running  |
| the CONFIGUR program. |
+-----+
```

The Menu

When you type RUN, the CONFIGUR menu will appear on the terminal screen. Across the top of the screen is the name and date of the version, followed by a set of general instructions.

The bottom two thirds of the screen is divided into two boxes. Above the left-hand box is a message telling you which catalog or device is being configured. Check this to make sure you entered the catalog or device containing the system software. If you are in the wrong catalog or device, press Q to quit CONFIGUR and return to the Monitor. Then ENTER the correct device and RUN CONFIGUR again.

Inside the two boxes are the items you need to specify in order to properly configure your system. Each item is followed by the current specification.* To change the specification, use the arrow keys to move the cursor until it is positioned over the item. Then press the space bar to change the specification. Each time you press the space bar, a new specification will appear after the item. Continue pressing the space bar until the specification that matches your system appears. Then move on to the next item.

* If the items are followed with blank spaces instead of the current specifications, then your system is configured for the wrong terminal. Turn to page 19.

Terminal

The first item you will specify is the terminal. The computer recognizes the following terminals:

- ADM (Models 3, 5 or 11)
- VT100
- Datamedia
- VT640
- DQ640

When "Other" is selected, CONFIGUR will ask the question (as soon as you move the cursor)

Nulls to send to end of line?

See the manual for your terminal for this information, type in the correct number (usually zero) and press RETURN.

NOTE: If the terminal type does not match the terminal actually connected to the TERMINAL port, garbage will appear on the screen when you use some Monitor commands (such as CLS or LIST). The Screen Editor will not function at all and the CONFIGUR program itself will only function minimally. See the section, "Reconfiguring for the Terminal," for instructions on how to configure system software that has the wrong terminal specified.

Printer

The computer recognizes the following printers:

- Printronic
- IDS/Dataproducts
- Diablo
- Dec-III
- LA-34

When Printronix, IDS/Dataproducts or LA-34 is selected, CONFIGUR will ask (once you move the cursor or press RETURN)

Does this printer have graphics [Y(es) or N(o)]?

Type in Y or N, according to your printer.

If your printer is other than those on the list, select "Other" and consult your printer manual for the number of nulls required, if any.

NOTE: If the printer type does not match the printer connected to the PRINTER port, your print-out may consist of garbage.

Computer Options

Processor Type

This specification is set at the factory. It is unlikely you will have to change it.

Memory Size

The memory size refers to internal memory only. Each M8K board installed in your system has 8K of memory and each M32K board has 32K. If you have two M32K boards, you will select the 60K specification, as the system does not recognize 64K.

NOTE: If you specify more memory than you actually have, you will not be able to load the system.

Hardware Mul/Div

You have a Multiply/Divide Unit (D4567 board) if you have a Synclavier (R) and/or a Winchester attached to your system.

Clock Speed

Normal speed for Synclavier (R) systems is 200 Hz. Only the early Synclavier (R) I system is set at 100 Hz.

Printer Interface

Set this to Yes if you have a D40 printer/modem interface board.

Music Interfaces

The music interfaces are set to Yes or No, depending on whether or not you have the specified boards installed.

System Device and Current Device

You will use these options to set the default devices. The system device must be set to the device where your system software is stored: W0 for Winchester systems and F0 for floppy-based systems. The current device should be set to the same device as the system device.

Storage Devices

You must specify which storage devices are attached to the system and what kind each is.

The system will recognize up to four floppy drives: F0, F1, R0 and R1. These can be

- 8-inch maxidiskette drive (8" maxi)
- 5-inch single density minidiskette drive (5" SD Mini)
- 5-inch double density minidiskette drive (5" DD Mini)

The system will recognize up to four Winchester disks. Two can be connected directly to the computer. Each Winchester connected to the computer can have an additional Winchester as a "piggy-back" device.

On the CONFIGUR menu, the first W0 and the first W1 in the column are the ones connected to the computer.

You will specify the size and capacity of your Winchester(s) as one of the following:

- 8-inch 10 megabyte (8", 10 MB)
- 8-inch 20 megabyte (8", 20 MB)
- 8-inch 40 megabyte (8", 40 MB)
- 5-inch 5 megabyte (5", 5 MB)
- 5-inch 10 megabyte (5", 10 MB)
- 5-inch 15 megabyte (5", 15 MB)

NOTE: If you specify the wrong storage device type, you will not be able to load your system.

Configuring

When you have finished changing the parameters of your system, press RETURN. At the bottom of the screen, the instruction

Please verify configuration, then type 'OK' followed by RETURN

will appear. When you do this, the CONFIGUR program will reconfigure the system software to your new specifications. Then press Q to quit CONFIGUR and return to the Monitor.

If you decide not to reconfigure your system software, press Q to abort the program and return to the Monitor.

Reconfiguring for the Terminal

If your system software is configured for the wrong terminal, the CONFIGUR program will not operate as described above. You will be able to run the program and the menu will appear as usual. However, there will be no default specifications after the items in the two boxes and the cursor will be at the bottom of the screen at the end of a line of garbage.

To reconfigure for the correct terminal, follow these instructions:

1. Press the space bar twice. Another line of garbage will appear, but the last few characters of the line will be a terminal type. Each time you press the space bar, a different terminal type will appear at the end of a line of garbage.
2. When your terminal type appears, press RETURN, type 'OK' and press RETURN again.
3. Type Q to quit. You will be returned to the Monitor. If there is further configuration to be done, you will have to ENTER the desired device or catalog, recall CONFIGUR and run it.

LISTING

You will use the LISTING program to print out listings of XPL source files from any attached storage device.

The Menu

When you run LISTING, the LISTING menu will appear on the terminal screen. Across the top of the menu is the program name and date of the version, followed by a set of general instructions.

The middle of the screen is divided into two boxes, one containing available commands, the other the options for the program.

Across the bottom of the screen is space for the title of the LISTING.

Commands

The left-hand box contains the commands you can use with the program:

C to display Catalog
T to change Title
Q to Quit (return to Monitor)

RETURN to start printout

- When you type C, the Menu will be replaced with a display of the current catalog.
- When you type T, the cursor will move to the space at the bottom of the page where you can type in the title you want for the printout. Press RETURN to return the cursor to the options box.
- If you want to return to the Monitor, press Q.
- When you are ready to start the printout, press RETURN.

Options

You make the selections for the first four options by using the up and down arrow keys to position the cursor over the option you want to change and then pressing the space bar until the selection you want appears.

Storage Device

The default is your current device. You can change this to any other device your system is configured for.

Printer

The default is the printer specified in your system configuration. You can change this to any other printer, including "Other." You can also select "Terminal" if you want the files printed out on the terminal.

File Select

All files on the specified storage device will be printed in the order they appear if File Select is set to No. If it is set to Yes, you will be given the opportunity to select the files to be printed before the printout begins.

Print Index Page

If you select Yes for this option, an index of files will be printed, including the page where each file begins and its length in words. The index will also include each PROCEDURE, INSERT, WHEN, LIBRARY and MODULE statement along with its page and line numbers.

The last three options, Number of Copies, Page Length and Page Width, are set by positioning the cursor over the option and typing in a new value. When you set the page length and width, you must remain within the physical limits of the paper or printer you are using.

Printing Out

When you have selected your options and set your parameters, press RETURN to start the LISTING.

If you have the File Select option set to Yes, the menu will be replaced by a directory of files on the current device. Move the cursor with the arrow keys and select (or deselect) a file by pressing the space bar. Unselected files are preceded by a vertical line (|); selected files are preceded by a greater-than sign or arrow (>).

After you have selected the files to be printed, press RETURN again to initiate the printout.

Special Text Key Words

The name of the file being listed is printed on the top line of each page of the listing along with the page number. If you use the symbol \$TITLE in a comment, such as

```
/* $TITLE Inventory Program */
```

the words following the symbol will be printed in the center of the second line on each page of the file listing. Similarly, by using the symbol \$SUBTITLE in a comment, you can give a heading to a section in your file. Both \$TITLE and \$SUBTITLE symbols cause the listing output to start a new page and appear in the index. \$PAGE can be used (in a comment) to start a new page.

A listing has automatic formatting by default. To turn off the automatic formatting, include \$NOFORMAT in a comment; to turn it back on, include \$FORMAT in a comment.

FIND

The FIND program is used to locate patterns in one or more files. The patterns can be single characters or strings of characters. A pattern can include a "wild card" or symbol which can stand for any character or string. The asterisk (*) is the wild card standing for a string; the question mark (?) is the wild card standing for a single character.

For example, if you want to locate all the tempo changes in a SCRIPT composition, you can instruct the FIND program to locate

AT BEAT * TEMPO

The program will print out all tempo change statements, no matter what beat number occurred between AT BEAT and TEMPO.

Or you might want to locate all C major chords, no matter what octave they occur in. To do this, you would instruct the program to locate

[C? E G]

and all C chords would be located, whether the root was C2 or C3 or whatever. (It will not, however, locate a C chord in which the range was not indicated, as in [C E G].)

If the pattern you want to locate contains either an asterisk or a question mark in it, then you will have to tell the FIND program that these characters are part of the pattern rather than wild cards. To do this, you will precede each asterisk or question mark with a slash (/). For example, if you want to locate the string

A*B

you will instruct the program to locate

A/*B

Running FIND

When you run FIND, the program will first ask you if you need help. Type Y for yes or N for no.

If you ask for help, the program will print out a reminder of the two wild cards you can use in your pattern, plus the symbol used to cancel the wild card symbol:

- * : zero or more occurrences of any string pattern
- ? : one or more occurrences of any character
- / : an indication that the next character is part of the pattern

The program will then ask you to type in the pattern you want to locate. Type it in, including any wild cards, and press RETURN. The program will then ask you whether you want any options and if you want help at this point. Type in a question mark if you want to see the list of the available options:

- c : No distinction is made between upper and lower case when matching.
- x : All lines but those matching are printed.
- l : Each line is preceded by its line number in the file.
- n : Filenames will not be printed.
- # : Only the number of matching lines is printed.
- f : Only the names of files with matching lines is printed.
- s : Status information is printed.

To set an option or options, type in the letter(s) corresponding to the option(s) you want and press RETURN. If you select more than one option, do not separate the letters by spaces.

When you have typed in your selection(s), if any, press RETURN.

The program will then ask you to list the filenames of the files you want searched, each one separated by a space. You can use the wild cards in the filenames entered. For example, if you want all files searched for the pattern, type *. Or, if you have a series of files with similar filenames, such as COMP1, COMP2, COMP3, you can use the wild card ?, as in COMP?.

Once you have listed the filenames, press RETURN and the program will start to run. When the pattern is located, the program will print out the information as requested in the options selection and then return you to the Monitor.

TAPECAT

The TAPECAT program allows you to make changes in the catalog of files stored on the tape drive. When you run it, you can

- print out the tape catalog;
- print out all catalog information;
- alphabetize the catalog;
- unsave or rename a file in the catalog.

Running TAPECAT

When you run TAPECAT, a set of instructions will appear on the terminal screen. The instructions include a list of all valid commands used with TAPECAT. Any command can be abbreviated to its first three letters.

The first command you will enter is the LOAD command. This command sets the tape up to be operated on. If you want to change tapes, you will enter the UNLOAD command, exchange the tapes, and then enter the LOAD command again.

Several of the commands print out information on the tape catalog. Other commands make changes in the catalog.

CATALOG

The CATALOG command prints out the tape catalog on the terminal screen.

DUMP

The DUMP command prints out all catalog information on the terminal screen.

HARDCOPY

The HARDCOPY command prints out all catalog information on the printer.

SORT

The SORT command alphabetizes the catalog.

UNSAVE

The UNSAVE command erases a specified filename from the catalog.

RENAME

The RENAME command renames a specified file in the catalog.

UNDO

If you execute a series of commands and then change your mind, the UNDO command will read the original catalog from the tape.

UPDATE

The UPDATE command affects the changes made with the UNSAVE, RENAME or SORT commands.

You exit the TAPECAT program by typing QUIT.

The changes made through the UNSAVE, RENAME or SORT commands do not immediately affect the catalog on the tape. You must type UPDATE to make the actual change on tape.

If you type QUIT or UNLOAD without having entered the UPDATE command, you will be asked whether or not you want to UPDATE the tape catalog.

RECOVER

Sometimes one or more sectors of a floppy diskette or your Winchester disk is defective and any information stored on these sectors is lost. When you try to recall the file containing these sectors, the terminal will start beeping.

The destroyed information cannot be recovered. However, the RECOVER Utility program allows you to recover the remainder of the file from the undamaged sectors. You can then reenter the information from the damaged sectors using the Screen Editor. (RECOVER only works for text files as these are the only types of files you are able to reconstruct.)

If you are operating from a Winchester disk, you should enter the subcatalog containing the damaged file before running the program.

When you run RECOVER, a brief description of the program will appear on the screen, followed by the first instruction. As you proceed through the program, a series of instructions will appear on the screen to step you through the RECOVER procedure.

If you are operating from a Winchester disk, you will be asked to locate the damaged file for the program by typing in 1 for Winchester or 0 for floppy diskette. If you type in 1, you will be asked to type in the name of the file to recover and then a new filename. The program will then recover the undestroyed parts of the file, make a copy of them, and store the recovered file in the current catalog.

If the damaged sectors are on a floppy diskette, you will be asked to insert the damaged diskette into FLOPPY DRIVE 1 and name the damaged file. The RECOVER program will copy the undestroyed parts of the file into the current catalog on the Winchester.

If you are operating from a dual floppy drive system, you will be asked to insert the damaged diskette into FLOPPY DRIVE 1 and a formatted diskette into FLOPPY DRIVE 0. When you type in the name of the file you want to recover, the program will write all the undamaged information in that file onto the diskette in FLOPPY DRIVE 0. If a file with the same filename exists on the F0 diskette, you will be asked to type in a new filename for the file.

You should use the selective mode of the FORMCOPY program to copy all the other files on the diskette onto another diskette. Do NOT try to copy the entire diskette or the computer will crash when it attempts to copy the defective sectors.

At the end of the program, you will be returned to the Monitor.